# **FACT SHEET**



Clinton Coal Gas Site Clinton, Iowa

December 2002

### INTRODUCTION

The U.S. Environmental Protection Agency (EPA) Region 7 continues to oversee site activities at the Clinton Coal Gas site in Clinton, Iowa. EPA has conducted soil and ground water sampling on the site. The contaminants of concern are volatile organic compounds (VOCs), including benzene and toluene; metals, including lead and chromium; and polynuclear aromatic hydrocarbons (PAHs).

#### SITE UPDATE

The Alliant Engergy Corporation (Alliant) has completed an Engineering Evaluation/Cost Analysis (EE/CA) for the Clinton Coal Gas Site in Clinton, Iowa. The EE/CA is a study of cleanup options for the site and the costs associated with those options. The EE/CA addresses the coal tar contamination at the site. Alliant did all of the work associated with the EE/CA under an agreement with the EPA. All of the work was done under EPA's oversight.

# **BACKGROUND**

# **ANNOUNCEMENTS**

EPA will hold an information meeting

Thursday, December 19, 2002

7 p.m.

Parks and Recreation

Erickson Center

1401 11<sup>th</sup> Avenue North

Clinton, Iowa

EPA staff will explain the Engineering Evaluation/Cost Analysis, or EE/CA for the Clinton Coal Gas Site. The EE/CA examines removal options for the site.

# The 45-day public comment period for the EE/CA opened on November 25, 2002 and closes on January 9, 2003.

Comments can be submitted at the December 19 meeting, orally or in writing. Oral and written comments (post marked no later than January 9, 2003), can also be submitted to:

Hattie Thomas, EPA Region 7 Office of External Programs 901 N. 5<sup>th</sup> Street Kansas City, Kansas 66102 1-913-551-7003 Toll-free 1-800-223-0425

Fax: 1-913-551-7066

The 7.9 acre site includes a former manufactured gas plant (FMGP) and steel works. The FMGP operated from the late 1800s to 1952. Interstate Power Company offices currently occupy the western portion of the site. The former Clinton Bridge Works/Allied Structural Steel buildings, formerly used for manufacturing beams for bridge construction, were on the eastern portion of the site.

#### ENGINEERING EVALUATION/COST ANALYSIS

Alliant conducted field work to determine the nature and extent of the coal tar contamination. They installed monitoring wells and sampled the ground water; surface and subsurface soil, the air, the Mississippi River sediment and sewer lines that cross the site, and sampled surface water from the Mississippi River.

The goal of the EE/CA is to reduce potential exposures, migration and future releases of contamination associated with the former manufactured gas plant. Based on the EE/CA investigations, the following areas were identified as areas of concern. For each identified area, the alternatives that were looked at are identified as well as the recommended alternative.

**!** Vadose Zone Soil. The vadose zone is the geologic zone through which contaminants travel before entering ground water. During the investigation, the vadose zone soil was identified as an area that should be addressed. Addressing this area of the site will reduce potential exposure to workers on the site. The vadose zone areas include the Interstate Power and Light and the Allied Steel properties. The following alternatives were evaluated:

No action.

✓ Institutional and engineering controls.

Excavation with institutional and engineering controls.

Chemical oxidation with institutional controls.

**Recommended alternative**: Institutional and engineering controls is the recommended alternative for the vadose zone soil, for both the Interstate Power and Light property and the former Allied Steel property. The institutional controls would reduce the possibility of direct contact by limiting intrusive activities. The engineering controls would provide a way for maintaining long-term protection while allowing the greatest flexibility for future development. Estimated cost to implement: \$749,000.

! Ground Water. Ground water is water that is found underground in cracks and spaces in soil, sand and rocks. Based on current and anticipated future site uses, several remedial technologies were compiled. The alternatives considered for the impacted ground water are:

No Action.

Ground Water Monitoring with Institutional Controls.

Monitored Natural Attenuation with Institutional Controls.
 Ground Water Pump and Treat with Institutional Controls and Monitoring.
 Biosparging with Institutional Controls and Monitoring.
 Ozone Sparging with Institutional Controls and Monitoring.

**Recommended alternative**: Monitored natural attenuation with institutional controls is the recommended alternative. It does not appear likely that this ground water will be used. The recommended alternative would be the least restrictive to the site development or use, and less costly to implement. Estimated cost to implement: \$1,959,000 and \$2,515,000, respectively.

! Special Consideration Areas. The special consideration areas are those areas or structures that could represent potential continuing source areas or are inaccessible for conventional remedial activities due to buildings or specific land uses. The special consideration areas are identified below, with the recommended alternative. All of the alternatives include a no action alternative as well as an institutional and engineering controls alternative. The preferred alternative for each area is also identified.

<u>Accessible Gas Holders and Tar Wells:</u> Excavating the contaminated material, treating it and/or disposing off site, is the recommended alternative. This alternative addresses the FMGP by-products. It also reduces the continuing or future release from these structures. Estimated cost to implement: \$1,305,000.

<u>Inaccessible Gas Holder:</u> Institutional controls is the recommended alternative. This recommended alternative provides long-term protection of human health by managing potential exposure risks. Estimated cost to implement: \$60,000.

**Railroad Corridor:** Institutional controls is the recommended alternative for the impacted vadose zone railroad corridor. Direct investigative activities were not possible because of the active nature of the railroad corridor. However, nearby borings indicate soil and ground water impacts probably extend beneath the railroad corridor. This alternative provides long-term protection of human health by managing potential exposure risks. Estimated cost to implement: \$60,000.

Storm Sewer and Water Intake Lines: Line abandonment is the recommended alternative. This alternative involves grouting the lines with concrete foam and continual monitoring. One abandoned water intake line and two unused storm sewer lines exist in the southern portion of the former Allied Steel property and extending toward the Mississippi River. Based on results of the site characterization, the lines may contain impacted ground water and

sediment. These lines have the potential to serve as migration paths for the contamination. This alternative provides the greatest overall effectiveness for the storm

sewer and water intake lines. Estimated cost to implement: \$210,000.

"Hot Spot" Surface Soils: Excavation and disposal of the "hot spot" surface soils is the recommended alternative. Based on the investigation, only one small area of "hot spot" surface soil area appears to generate unacceptable human health risks. These risks are due to polychlorinated biphenyl (PCB) impacts. Estimated cost to implement: \$95,000.

#### **NEXT STEPS**

EPA will make a final decision on how the site will be addressed. The decision will be published in a document called an Action Memorandum. EPA will consider public comments when preparing the Action Memorandum and prepare responses to such comments.

#### ADDITIONAL INFORMATION

EPA encourages community members to review and comment on the Engineering Evaluation/Cost Analysis for the Clinton Coal Gas site. The EE/CA and accompanying documents are in the Administrative Record. The EE/CA and Administrative Record are available for public review at the following information repositories, during normal business hours:

Clinton Public Library EPA Region 7
306 8<sup>th</sup> Avenue South Docket Room
Clinton, Iowa. 901 N. 5<sup>th</sup> Street
Kansas City, Kansas

If you have questions or need more information on the site, please contact:

Hattie Thomas, Community Involvement Coordinator EPA Region 7 901 N. 5<sup>th</sup> Street Kansas City, Kansas 66102 1-913-551-7003 Toll-free 1-800-223-0425

Fax: 1-913-551-7066

Email: thomas.hattie@epa.gov.

###